Advanced Leak Detection Lidar (ALDL), 1st Quarterly Report

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Prepared for: *DOT, PHMSA*

Project Title: *Advanced Leak Detection Lidar*

Prepared by: *Ball Aerospace & Technologies Corp.*

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Project Title: *<Title>*

Prepared by: *<Contracting Organization>*

Contact Information: *<Person that prepared the report and their contact information (e-mail and phone number)>*

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Public Page Section-

Results and Conclusions: The Advanced Leak Detection Lidar (ALDL) project updated the Instrument Performance and Radiometric Math Model in the 3 months of this 24 month project. This update provides improved prediction of both the spatial resolution and sensitivity to molecular species that would indicate leaking hazardous liquids. A flow-down of refined technical characteristics has been accomplished for both the overall instrument and the laser components of the instrument.

Plans for Future Activity: Near future activity includes procurement of all major components and detailed design of the laser transmitter and receiver subsystems and the

instrument control electronics. Software architecture and algorithms will be define in the next quarter (3 month period).

The project team plans to participate, as possible, in the next public technical meeting of the Pipeline Research Council, International (PRCI) which is upcoming in February of 2014.

Press Release Coordination: Press releases may be coordinate with Roz Brown, 303-533-6059, rbrown@ball.com